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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/669,098	09/24/2003	Manabu Ishikawa	50395-229	1843

7590 12/28/2005

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Washington, DC 20005-3096

EXAMINER

CHIEM, DINH D

ART UNIT	PAPER NUMBER
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2883

DATE MAILED: 12/28/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/669,098

Applicant(s)

ISHIKAWA ET AL.

Examiner

Erin D. Chiem

Art Unit

2883

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 September 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1, 4, 7 and 8 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 4, 7 and 8 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____

- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: Brian Healy

DETAILED ACTION

This office action is in response to the amendment filed on September 19, 2005. Claims 1 and 4 are amended and claims 2, 3, 5, and 6 are cancelled, and claims 7 and 8 are newly added. Currently, claims 1, 4, 7, and 8 are pending. The objections made to the Specification and claims 4 and 6 are withdrawn in view of the amendment that overcome the objections.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1 and 4 are rejected under 35 U.S.C. 102(e) as being anticipated by Sato et al. (US 2002/0126456 A1, hereinafter "Sato"). Sato teaches an optical module comprising an optical subassembly (6) including a semiconductor optical device; a substrate (26) securing the optical subassembly and mounting a circuit for driving the semiconductor optical device, the circuit generating heat; a metal base (2) enclosing the optical subassembly, the base providing an opening for exposing the circuit; a conductive cover (28 and [0063]) (please note: metal is a conductive material); a thermal block (60) made of metal for dissipating the heat generated by the circuit, the thermal block arranged so as to cover the opening of the base and being thermally in contact with the circuit and the cover [0086]; and a thermal sheet

Art Unit: 2883

(62c) made of molded resin [0094] disposed between the thermal block and the circuit (Fig. 8, 9, 12A, and 15A and paragraphs [0082], [0086], [0089], and [0103]).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 7 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sato in view of Anderson et al. (US 2002/0122636 A1 hereinafter Anderson).

Sato teaches an optical module comprising an optical subassembly (6) including a semiconductor optical device; a substrate (26) securing the optical subassembly and mounting a circuit for driving the semiconductor optical device, the circuit generating heat; a metal base (2) enclosing the optical subassembly, the base providing an opening for exposing the circuit; a conductive cover (28 and [0063]) (please note: metal is a conductive material); a thermal block (60) made of metal for dissipating the heat generated by the circuit, the thermal block arranged so as to cover the opening of the base and being thermally in contact with the circuit and the cover [0086]; and a thermal sheet (62c) made of molded resin [0094] disposed between the thermal block and the circuit (Fig. 8, 9, 12A, and 15A and paragraphs [0082], [0086], [0089], and [0103]). Furthermore, in Fig. 12A, it is clearly visible that insulator sheet (62c) is sandwiched between the thermal block (60) and the cover (28) wherein the thermal block is secured by pressing an outer surface thereof to the inner surface of the opening.

Art Unit: 2883

However, Sato does not teach the opening has an inner surface sloped from the cover to the substrate.

Anderson teaches in Figure 1 (122), see Fig. 2 for a fully assembled module, is a sloping inner surface connecting from the cover to the opening wherein the thermal block, cover with ridges (104), is secured by pressing an outer surface thereof to the inner surface of the opening. The sloping edges are employed for the purpose of aligning the ferrule when inserted into the cavity (see Fig. 1 and 2 and paragraph [0134]).

Since Sato and Anderson are both from the same field of endeavor, the purpose disclosed by Anderson would have been recognized in the pertinent art of Sato.

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to apply the same concept to Sato's module by sloping the surface of the housing, for example in Fig. 5, at the end where the optical element assembly (24) is located to connect into another module. **The motivation** for sloping the surface of the housing near the optical element assembly end (24) is to provide Sato's module with the capability of plugging into another device that only requires the light to couple into the module (20) wherein the current state the module (20) is less versatile because only a fiber with a connector may be inserted into the optical element assembly end (24).

Response to Arguments

In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., thermal block is rigid or not exhibiting a certain degree of flexibility are not recited in the rejected claim(s).

Art Unit: 2883

Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

In response applicant's argument regarding the opening of base 11 is not the same as the opening 111 of the present invention is spurious since Sato's module meets the limitation because the base providing an opening for exposing the circuit. The Examiner interprets the exposing pins as part of the circuit.

In any case, applicant's arguments with respect to claims 1 and 4 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

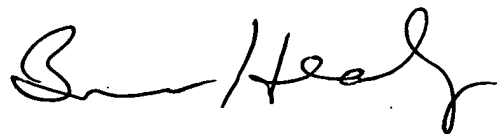
Art Unit: 2883

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Erin D. Chiem whose telephone number is (571) 272-3102. The examiner can normally be reached on Monday - Thursday 9AM - 5PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Frank G. Font can be reached on (571) 272-2415. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Erin D Chiem
Examiner
Art Unit 2883

A handwritten signature in black ink, appearing to read "Brian Healy". The signature is fluid and cursive, with the first name "Brian" and last name "Healy" clearly distinguishable.

Brian Healy
Primary Examiner